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Feasibility of using a sheep cooperative to control leafy spurge

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Abstract:

This study examined the economic feasibility of a 5000-head, cooperatively owned sheep operation for leafy spurge control. The objectives were to determine 1) return on investment of the cooperative, 2) feasible structures for the cooperative, and 3) capital investment required by members in the cooperative. The sheep flock management alternatives considered were 1) winter lambing, 2) spring lambing, and 3) fall lambing. The fall lambing scenario was determined operationally infeasible.

Total capital investment per ewe for the winter lambing scenario was \$301 versus \$216 for the spring lambing scenario. The expected net income for the winter lambing scenario was negative. The minimum break-even lamb selling price and number of lambs sold per ewe for the winter lambing scenario was \$84.10/cwt and 1.33, respectively. Alternatively, the spring lambing scenario net income was estimated at \$124,000 annually. The minimum break-even lamb selling price and number of lambs sold per ewe for the spring lambing scenario was \$59.51/cwt and 0.94, respectively. The expected annual return on investment (assuming 50% equity) for members with the spring lambing scenario, based on a 50-acre leafy spurge infestation in a 100-acre pasture with new fence, was 16 percent, based on 1 ewe with lamb per acre of leafy spurge.

A sheep cooperative would be an economically viable alternative to individual ownership of sheep by cattle producers. While these returns are not a guarantee of success, they do indicate the economic feasibility of using a sheep cooperative to control leafy spurge.